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### HOE 901 (INSULIN GLARGINE) IMPROVES SATISFACTION WITH INTENSIFIED INSULIN TREATMENT FOR TYPE 1 DIABETES

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**Aim:** Insulin glargine, a new long-acting insulin, provides constant, peakless insulin release and is designed for once daily administration. Satisfaction with treatment (Diabetes Treatment Satisfaction Questionnaire (DTSQ)) and psychological well-being (Well-being Questionnaire (W-BQ)) were assessed in 9 European countries in a phase III multicentre randomised controlled open clinical trial comparing the effects of insulin glargine and NPH human basal insulin. **Methods:** The questionnaires, were self-completed at baseline, and at least once at weeks 8, 20 or 28 by the 517 patients (287 men and 230 women; mean age  $39.7 \pm 12.1$  yrs; mean duration of diabetes  $16.0 \pm 10.7$  yrs; mean GHb at baseline  $7.9 \pm 1.2$  %). Baseline scores of the DTSQ (mean  $27.96 \pm 5.65$ ; maximum possible score = 36) and of the W-BQ (mean  $49.88 \pm 9.13$ ; maximum possible score = 66) were high in this population. Analysis of covariance was performed on the change from baseline scores, using treatment and pooled site as main effects with baseline scores as covariate. **Results:** Treatment satisfaction improved during treatment with insulin glargine at all time points and at endpoint (last on-treatment assessment) whereas it deteriorated slightly with NPH insulin. These differences were significant throughout the study (change from baseline at end point  $+1.27$  vs  $-0.56$ ;  $p = 0.0001$ ). Outcomes were better with insulin glargine for both Perceived Frequency of Hyperglycaemia and Perceived Frequency of Hypoglycaemia with statistically significant differences at week 28 and at endpoint for hyperglycaemia ( $p = 0.037$  and  $0.038$ ) and at week 20 ( $p = 0.002$ ) for hypoglycaemia. Glycaemic control, as measured by GHb, was essentially unchanged in both treatment groups. There was no difference in psychological well-being between the treatment groups. Mean W-BQ scores in these patients increased during the study in both groups ( $p$ value). Analysis of the W-BQ subscales shows that the observed effects on general well-being are attributable to effects on all subscale scores. **Conclusion:** The psychological outcomes observed in this study include treatment-independent improvements in general well-being. More substantial effects were seen on treatment satisfaction which was statistically significantly improved with insulin glargine, together with a decrease in perceived frequency of hyperglycaemia and hypoglycaemia compared with NPH.